

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (currently amended) A non-aqueous electrolyte secondary cell comprising:
a cathode comprising $\text{Li}_x\text{Fe}_y\text{PO}_4$ having a particle diameter not greater than 1 micrometer
and wherein $0 < x \leq 2$ and $1 \leq y \leq 2$;

an anode consisting of:

(1) a binderless sintered carbon material prepared by sintering a binderless carbon material capable of doping/dedoping lithium; and

(2) a conductive agent comprising Li and a tin or silicon, containing metal material which forms an alloy or a compound with Li; and
a non-aqueous electrolyte solution.

2-3. (canceled)

4. (previously presented) A non-aqueous electrolyte secondary cell comprising:

a cathode having a molded body comprising a cathode active material and a conductive agent, said active material comprising $\text{Li}_x\text{Fe}_y\text{PO}_4$ and having a particle diameter not greater than 1 micrometer wherein $0 < x \leq 2$ and $1 \leq y \leq 2$;

an anode having a molded body consisting of (1) a binderless sintered carbon material capable of doping/dedoping lithium, and (2) a conductive agent comprising, Li and a tin or silicon metal material which forms an alloy or a compound with Li; and

a non-aqueous electrolyte solution.

5-13. (canceled)

14. (previously presented) The non-aqueous electrolyte secondary cell of Claim 1, wherein said carbon material is selected from the group consisting of non-graphitizable carbon, graphitizable carbon, graphite, and mixtures thereof.

15. (previously presented) The non-aqueous electrolyte secondary cell of Claim 1, wherein said non-aqueous electrolyte solution comprises an electrolyte salt and a non-aqueous solvent.

16. (previously presented) The non-aqueous electrolyte secondary cell of Claim 15, wherein said electrolyte salt is a lithium salt having ion conductivity.

17. (previously presented) The non-aqueous electrolyte secondary cell of Claim 16, wherein said lithium salt is selected from the group consisting of LiClO_4 , LiAsF_6 , LiPF_6 , LiBF_4 , $\text{LiB}(\text{C}_6\text{H}_5)_4$, LiCl , LiBr , $\text{CH}_3\text{SO}_3\text{Li}$, $\text{N}(\text{C}_n\text{F}_{2n}\text{SO}_2)_2\text{Li}$, and mixtures thereof.

18. (previously presented) The non-aqueous electrolyte secondary cell of Claim 15, wherein said non-aqueous solvent is selected from the group consisting of propylene carbonate, ethylene carbonate, 1,2-dimethoxyethane, 1,2-diethoxyethane, diethyl carbonate, methyl ethyl carbonate, dimethyl carbonate, γ -butyrolactone, tetrahydrofuran, 1,3-dioxolane, 4-methyl-1,3-dioxolane, diethyl ether, sulfolane, methyl sulfolane, acetonitrile, propionitrile, and mixtures thereof.

19. (previously presented) The non-aqueous electrolyte secondary cell of Claim 4, wherein sintered carbon material is selected from the group consisting of non-graphitizable carbon, graphitizable carbon, graphite, and mixtures thereof.

20-21. (canceled)

22. (previously presented) The non-aqueous electrolyte secondary cell of Claim 4, wherein the silicon containing metal material of the conductive is selected from a group of materials consisting of SiB_4 , SiB_6 , Mg_2Si , TiSi_2 , MoSi_2 , CoSi_2 , NiSi_2 , CaSi_2 , CrSi_2 , Cu_5Si , FeSi_2 , MnSi_2 , NbSi_2 , TaSi_2 , VSi , WSi_2 , and ZnSi_2 and mixtures thereof.

23. (previously presented) The non-aqueous electrolyte secondary cell of Claim 4, wherein said non-aqueous electrolyte solution comprises an electrolyte salt and a non-aqueous solvent.

24. (previously presented) The non-aqueous electrolyte secondary cell of Claim 23, wherein said electrolyte salt is a lithium salt having ion conductivity.

25. (previously presented) The non-aqueous electrolyte secondary cell of Claim 24, wherein said lithium salt is selected from the group consisting of LiClO_4 , LiAsF_6 , LiPF_6 , LiBF_4 , $\text{LiB}(\text{C}_6\text{H}_5)_4$, LiCl , LiBr , $\text{CH}_3\text{SO}_3\text{Li}$, $\text{N}(\text{C}_n\text{F}_{2n}\text{SO}_2)_2\text{Li}$, and mixtures thereof.

26. (previously presented) The non-aqueous electrolyte secondary cell of Claim 23, wherein said non-aqueous solvent is selected from the group consisting of propylene carbonate, ethylene carbonate, 1,2-dimethoxyethane, 1,2-diethoxyethane, diethyl carbonate, methyl ethyl carbonate, dimethyl carbonate, γ -butyrolactone, tetrahydrofuran, 1,3-dioxolane, 4-methyl-1,3-dioxolane, diethyl ether, sulfolane, methyl sulfolane, acetonitrile, propionitrile, and mixtures thereof.

27. (previously presented) The non-aqueous electrolyte secondary cell of Claim 1, wherein the cathode further comprises a conductive material and a binder.

28. (previously presented) The non-aqueous electrolyte secondary cell of Claim 1, wherein the anode further includes a molded and sintered current collector material combined with said sintered carbon material.

29. (previously presented) The non-aqueous electrolyte secondary cell of Claim 1, wherein the tin or silicon containing metal material includes a metal selected from the list of elements and compounds consisting of B, Mg, Ti, Mo, Co, Ni, Ca, Cr, Cu, Fe, Mn, Nb, Ta, V, W.

30. (Previously presented) The non-aqueous electrolyte secondary cell of Claim 4, wherein said cathode further comprises a conductive material and a binder.

31. (previously presented) The non-aqueous electrolyte secondary cell of Claim 4, wherein the anode further includes a molded and sintered current collector material combined with said sintered carbon material.

32. (previously presented) The non-aqueous electrolyte secondary cell of Claim 4, wherein the silicon metal material includes Mg_2Si , Ni_2Si .